AFATDS' EFFECTS MANAGEMENT TOOL

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> ➢ **Promotes network-centric Fire Support**

> ➢ **Extends AFATDS' fires & effects capabilities and SA across networks to tactical and strategic staff and duty cells remote from the tactical AFATDS workstations.**

EMT Is a Client to AFATDS

Mapping Engine is JMTK or C2PC (Atlas SDK™)

Div/Corps FSEs

Mnvr Bn/Bde FSEs

FA Plt/Btry/ Bn CPs
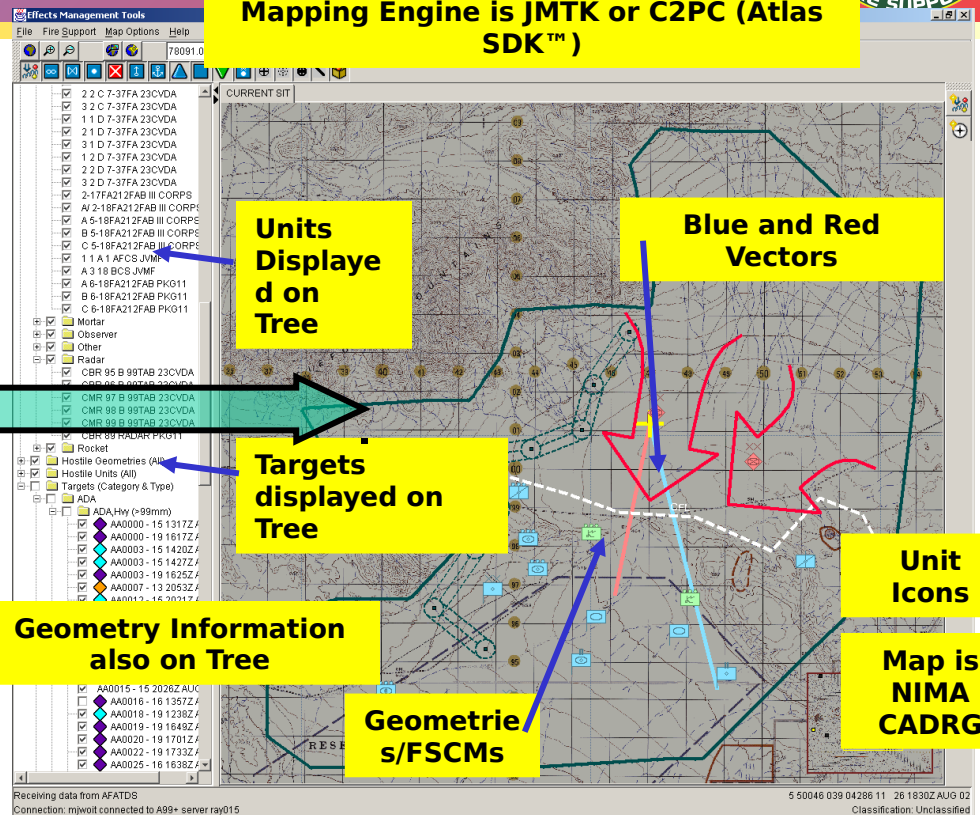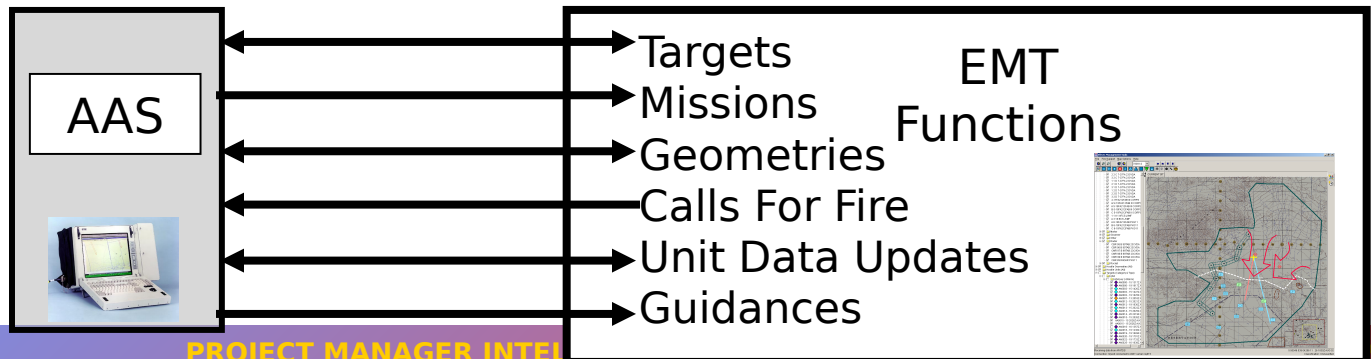
AFATDS Based Fire Support C2 Network

AAS*

Radars

DIVARTY/FA BDE CPs

*AFATDS Application Server
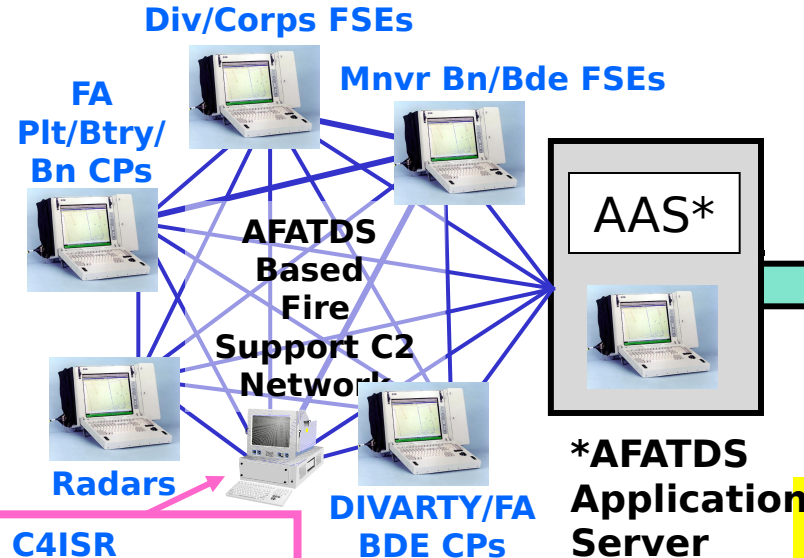
C4ISR Systems
- •TBMCS
- •GCCS-M
- •JSTARS-CGM
- •ABCS
  - •ASAS
  - •MCS
  - •FBCB2
  - •TAIS
  - •GCCS-A
  - •NATO FS
- •NFN
- •JTT

Units Displayed on Tree

Blue and Red Vectors

Targets displayed on Tree

Unit Icons

Geometry Information also on Tree

Geometries/FSCMs

Map is NIMA CADRG

Information flow between AAS and EMT

AAS

EMT Functions

- Targets
- Missions
- Geometries
- Calls For Fire
- Unit Data Updates
- Guidances

- **Display of all AFATDS-known information about units, targets, & geometries on background map, in "tree" format, in windows and tabularly in reports.**
- **Drill Down Status (Units, Targets, Geometries)**
- **Display Friendly/Enemy Fires**
- **Create/update/delete battlefield geometries**
- **CGRS / Kill Boxes**
- **Update unit information**
- **Initiate Calls For Fire**
- **FS Situation Monit**

- **Use AFATDS Target Types and User-Mapped Expanded Target Types (T-72 vs Tank:Heavy)**
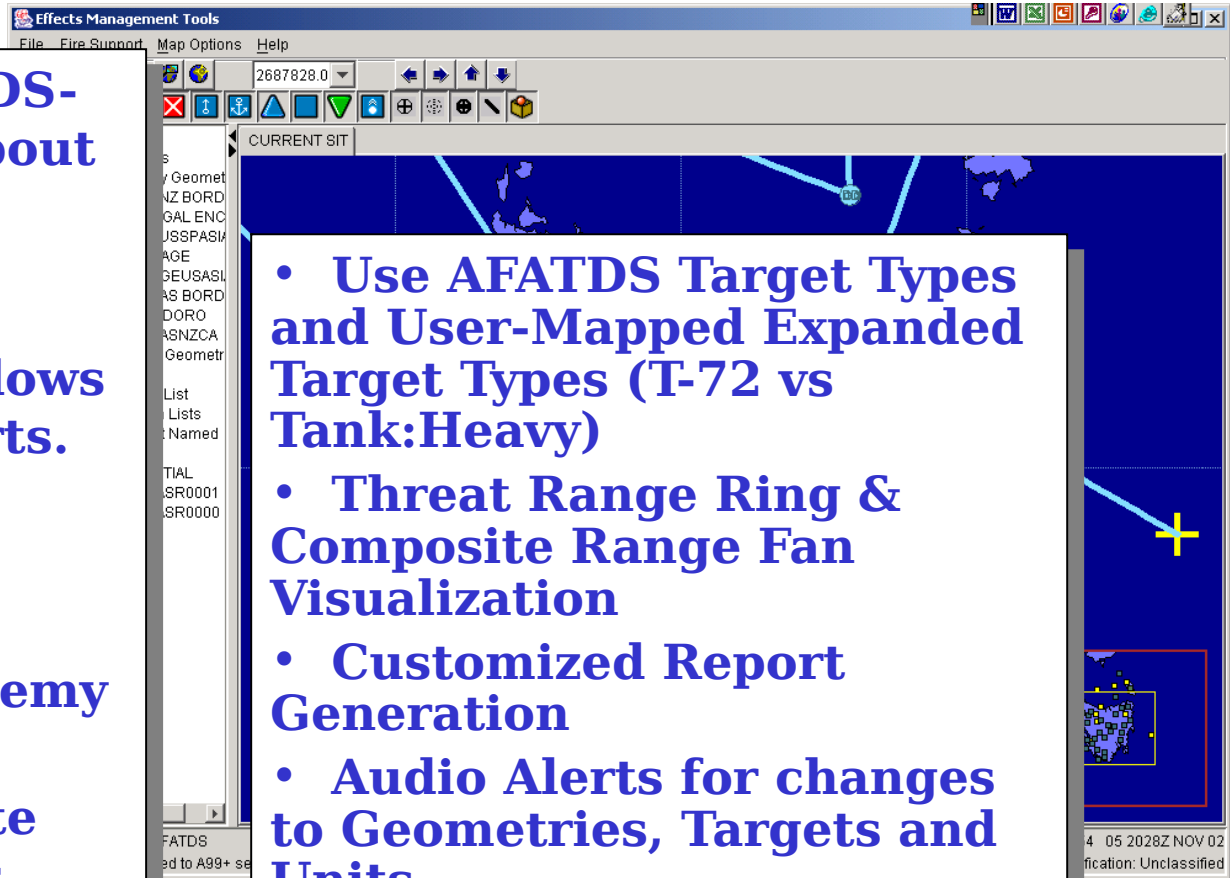- **Threat Range Ring & Composite Range Fan Visualization**
- **Customized Report Generation**
- **Audio Alerts for changes to Geometries, Targets and Units**
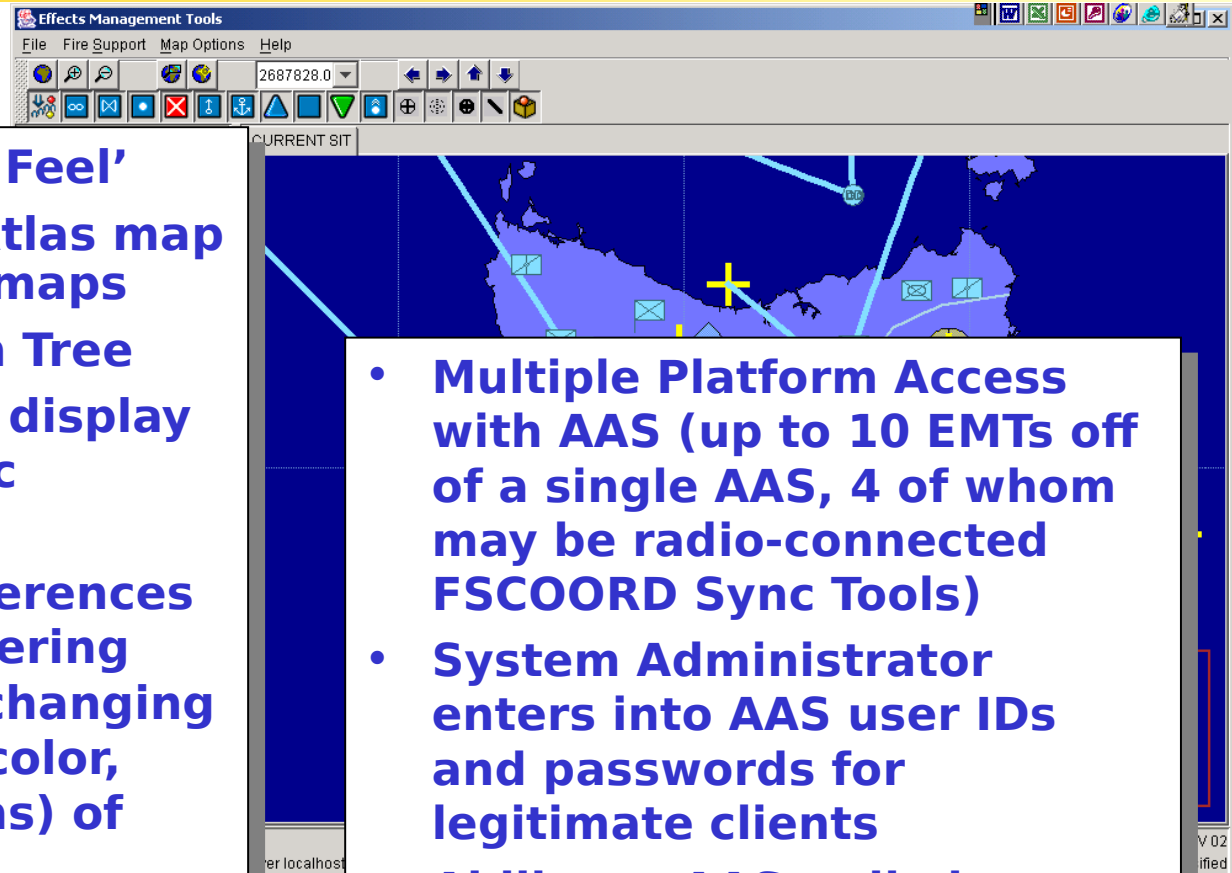- **J-SEAD Planning**
- **Terrain analysis & profiling**
- **Check fire missions against friendly unit & no**
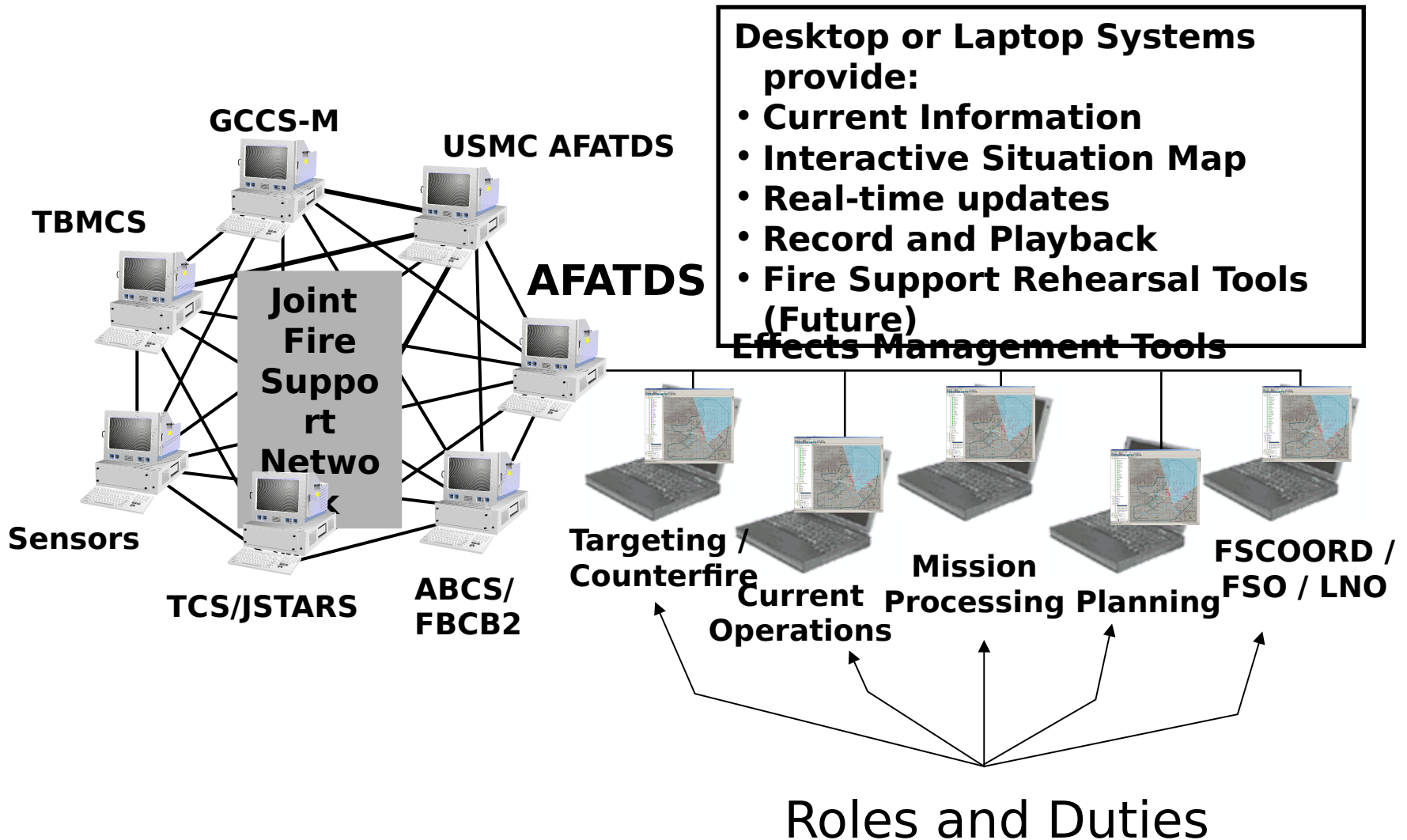
General EMT Features

- **Windows 'Look and Feel'**
- **JMTK and/or C2PC Atlas map engine using NIMA maps**
- **Dynamic Navigation Tree**
- **Highly configurable display tailorable to specific roles/duties**
- **Enhanced user preferences allow defining & filtering map overlays, and changing display attributes (color, boldness, line widths) of entities on the map**
- **Interoperability with MS Office® Products, including import/export with Excel™**

- **Multiple Platform Access with AAS (up to 10 EMTs off of a single AAS, 4 of whom may be radio-connected FSCOORD Sync Tools)**
- **System Administrator enters into AAS user IDs and passwords for legitimate clients**
- **Ability at AAS to limit access of individual clients to specific AFATDS data and functions**

Effects Management Tools
File   Fire Support   Map Options   Help
2687828.0
CURRENT SIT

How Do EMTs "Fit in the Picture?"

GCCS-M

USMC AFATDS

TBMCS

AFATDS

Joint Fire Support Network

Sensors

TCS/JSTARS

ABCS/ FBCB2

Desktop or Laptop Systems provide:
- Current Information
- Interactive Situation Map
- Real-time updates
- Record and Playback
- Fire Support Rehearsal Tools (Future)

Effects Management Tools

Targeting / Counterfire

Current Operations

Mission Processing

Planning

FSCOORD / FSO / LNO

Roles and Duties

EMTs are highly configurable to allow the User to control display attributes and the amount of information on the screen

- Roles and Duties
- Windows-like behavior
  - Excel-like tables
  - User set Preferences
- Display Filters
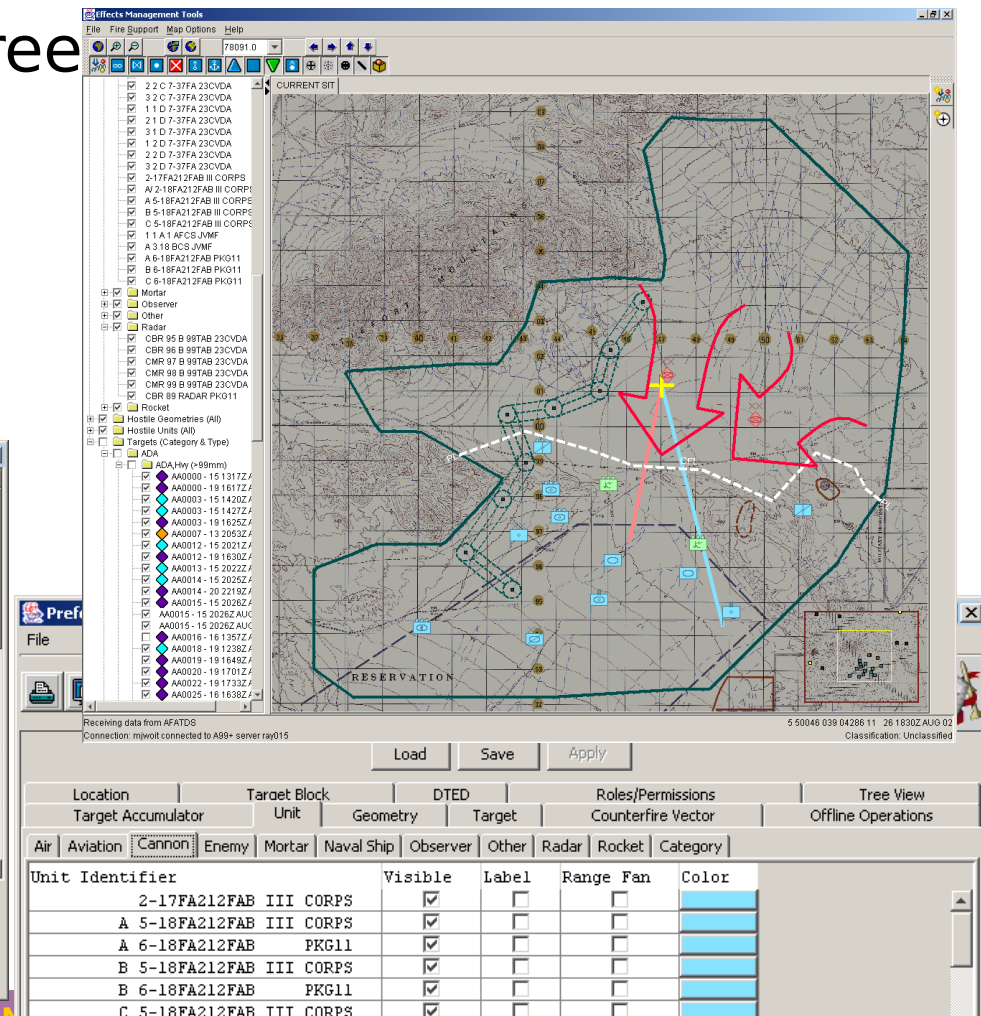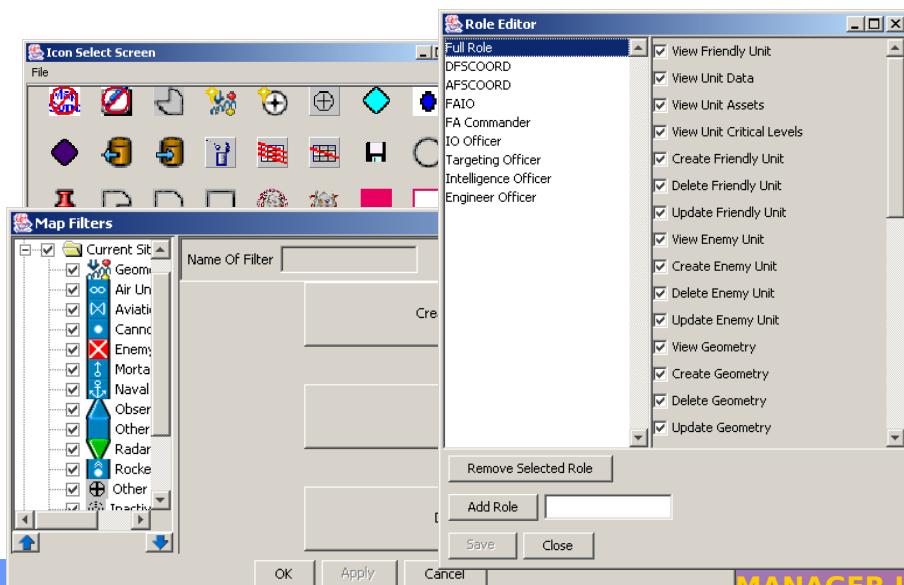
- **Plan**
  - ➢ **Dynamic SA with Detailed Drill Down**
  - ➢ **View Land Component Commander's Guidance, HVT, HPT, TSS**
  - ➢ **Submit & Track Air Support Requests (TBMCS)**
  - ➢ **Kill Box & Auto J-SEAD Planning**
- **Direct**
  - ➢ **Initiate Calls For Fire (CFFs)**
  - ➢ **Create & Execute Named Target Lists & Battlefield Geometries**
- **Coordinate**
  - ➢ **Manipulation & Export of EMT Generated Spreadsheet & PowerPoint Products**
- **Control**
  - ➢ **Mission Reports**

Plan

Control   Direct

Coordinate

C2 Process (JP 1-02)
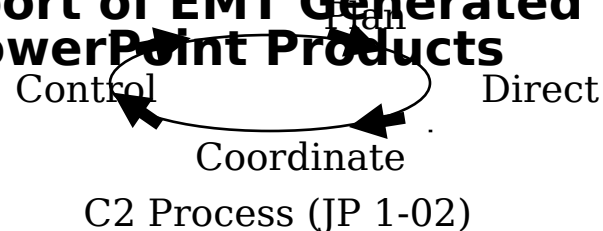
Interface Options for Dynamic, Interactive C2

- Application Running on User's Platform

- Integrated into System of Record

- Tactical Access via SINCGARS

Laptop, PC, or
UNIX Application

C2PC Integration

FSCOORD
EMT
(Tactical)

Allows rapid coordination of the use of sensors, planning for attack, and execution of the delivery of fires and effects against e

- NRT Sensor Data
- Target List Worksheets
- Named Target Lists
- Air Support Lists
- User Defined Target Types
- MIDB Access (V6.4)

General Tools for common FSE type operations. Enables profound control of the AFATDS Network

- Create, Edit, Delete Geometries
- View Guidance

- Mission Monitor
- Mission Fired Reports

EMT Air Support

Tools to extend the Air Support Functions resident in AFATDS to Platforms used by the Battle staff

- Import/Export of Excel based ASRs/ASLs
- Visualization of targets, ASRs, ASLs, ATOs
- Geometry/FSCM management
- Drill down on screen icons

Target List Worksheet

ASL Window

ASRs on ATO

Create ASR Window

EMT Air Support

AI Mission in a Created State

Denied CAS Mission

Air Mission Classes

Effects Management Tools
File Fire Support Map Options H

ASLs (All)
  ASL 23CVD MAIN
    01MJW000
    02MJW001

Target Data | Requested Munitions | More Target Data | More Mission Data | Basic Air Data

Air Target Data

ASL Name:	ASL 23CVD MAIN	ASR Number:	NOTSET
BE Number:		Air Mission State:	
Mission Kind:	Air Interdiction	Air Status:	Created
Mission Class:	AI:Air Interdiction		
Location:	5 47983 039 05512 11 11		
MIDB Enemy Unit ID:			
Target Type:	Arty,Med SP (121-160mm)		

Scheduling Data

ASR NET: 29 0600Z SEP 02   ASR NLT: 30 0559Z SEP 02

Reason For Nomination

Request Priority:: 1
Precedence: A
Comments:
Desired Effects: DLY FORCE HAVE NO LOSSES DUE TO INDIRECT FIRES.
Rationale: PCOMING DELIBERATE ATTACK AGAINST THE 11TH MRD

Air Mission Information - UNCLASSIFIED
File

ASR No	Tgt Category	Msn Class	Start Time
			29 0600Z SEP 02
Tgt No	Tgt Type		End Time
		Air Interdiction	30 0559Z SEP 02
Tgt Location		Airdrop	
	1 66021 000 00000 3	Assault Support	
Priority:	Precedence:	Close Air Support	
		Electronic Warfare	
Rationale:		Medical Evacuation	
Desired Effects:		Reconnaissance	

Status

FSCOORD SYNCH TOOL

- **WHAT is the FSCOORD Synch Tool?**

  ➢ A user- friendly Fire Support Command and Control and near real time Situational Awareness tool

  ➢ Tailored for FSCOORD use, connected by Combat Net Radio (SINCGARS) to an AFATDS server.

  ➢ Designed to replace the FSCOORD's map board and digitally provide overlays (FSCMs, Fire Plans, targets, Position Areas, Maneuver graphics, Fire Support Execution Matrix, FA Support Plan, target lists, and unit status information).

- **WHY do you need it?**

  ➢ The FSCOORD is the single analog choke point in the digital FSCOORD chain.

System Concept

SINCGARS

SINCGARS

GCCS-M / TCO

USMC AFATDS

188-220

AFATDS

Joint Fire Support Network

AFATDS

FS SA Mission Monitor FS C2 Tools

Maneuver Commander and FSCOORD / ECOORD

SPTCIM

TBMCS

US Navy FS Systems

ABCS/ FBCB2

Fire Support Clients

Baseline FST Features v6.4

- **Builds upon EMT & AFATDS 6.4**
- **CNR (SINCGARS)**
- **Windows NT 'Look and Feel'**
- **FS Situation Monitor**
  - **Unit Locations**
  - **Targets**
  - **Fire Support Coordination Measures**
- **Target Lists/Reports**
- **Friendly/Enemy Artillery Vectors (Counterfire COP)**
- **View Plans/Guidance**
- **Interoperability with MS Office® Products**